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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,706	12/02/2003	Yoshihisa Tsukada	1982-0208P	1979
2292	7590	02/10/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/724,706

**Applicant(s)**

TSUKADA ET AL.

**Examiner**

Thorl Chea

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12022003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fukui et al (Pub.No.: US 2002/010250) and Tsuji (US Patent No. 5,286,619).

Fukui et al disclose a photothermographic material substantially as claimed. See the SBR latex on page 33, [0360], [0362] wherein the Bu in the polymer chain is 26.5; on page 16, [0144], [0145], page 17, [0147] to [0175]; the organic polyhalogenated compound on page 18, [0188] to [0192] to page 19, [0104], [0195]; the amount of polyhalogenated compound of 0.49 on page 35. [0396], and the Tg of binder is from 20 °C to 70 °C on page 19, [0132]. Fukui discloses a polymer latex having butadiene monomer with percentage and glass temperature same to that claimed in the present claimed invention including the coating amount of polyhalogenated compound. Fukui et al may not disclose that the butadiene unit wherein R01 and R02 are never both hydrogen such as presented in the claimed invention. However, it has been known in Tsuji to associate the chain of polymer latex with a group other than hydrogen atom to improve development uniformity and rapid image forming. See the polymer in columns 9-10 such as polymer II-1 to II-9 wherein a methyl group associated therewith. Accordingly, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the polymer latex containing the butadiene group taught in Fukui et al including the use of the substituents known in the formation of latex taught in Tsuji with a reasonable expectation of

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achieving a binder with good quality such as providing the material development uniformity and rapid image form, and thereby provide an invention as claimed.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 1096310 (EP'310) and Tsuji (US Patent No. 5,286,619).

EP'310 discloses a photothermographic containing binder substantially as claimed. See the latex on page 39 wherein the butadiene group is from 10 to 35 % in the polymer chains and the glass transition temperature thereof is from 10 °C to 85 °C; the SBR latex and polyhalogenated compound on page 75, [0308] and page 65, [0275], [0276]. EP'310 discloses a polymer latex having butadiene monomer with percentage and glass temperature same to that claimed in the present claimed invention including the coating amount of polyhalogenated compound, may not disclose that the butadiene unit wherein R01 and R02 are never both hydrogen such as presented in the claimed invention. However, it has been known in Tsuji to associate the chain of polymer latex with a group other than hydrogen atom to improve development uniformity and rapid image forming. See the polymer in columns 9-10 such as polymer II-1 to II-9 wherein a methyl group associated therewith. Accordingly, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the polymer latex containing the butadiene group taught in EP'310 including the use of the substituents known in the formation of latex taught in Tsuji with a reasonable expectation of achieving a binder with good quality such as providing the material development uniformity and rapid image form, and thereby provide an invention as claimed. Moreover, A prima facie case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one

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skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). In this case the worker of ordinary skill in the art would have expected that the latex containing a butadiene group would provide similar results as binder. In this case, the worker of ordinary skill in the art would have formed polymer latex containing butadiene unit with a reasonable of providing a latex useful as binder for a photothermographic material.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/722,553 (Pub. US 2004/0121273) in view of Fukui et al (US 2001/010250). The development accelerator has been known in Fukui et al and it would have been obvious to accelerate the development of the material claimed in the present invention with the development accelerator taught in Fukui et al to provide the invention claimed the copending application.

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This is a provisional obviousness-type double patenting rejection.

***Conclusion***

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references provided with the information disclose polymer latex containing butadiene monomer similar to that taught in the prior art provided in the rejections above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *tn*  
February 4, 2005

*Thorl Chea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752